

UNITED STATES DISTRICT COURT  
SOUTHERN DISTRICT OF NEW YORK

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UNITED STATES OF AMERICA

v.

JATIEK SMITH, ET AL.,

Defendants

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Case No. 22 Cr. 352 (JSR)

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**DEFENDANTS' MOTION TO EXCLUDE EXPERT TESTIMONY REGARDING  
HISTORICAL CELL SITE INFORMATION AND ANY TESTIMONY OR  
EVIDENCE REGARDING INFORMATION PRODUCED BY THE CELLEBRITE  
UFED TOOL**

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**THE COURT SHOULD EXCLUDE EXPERT TESTIMONY REGARDING  
HISTORICAL CELL SITE INFORMATION AND ANY TESTIMONY OR EVIDENCE  
REGARDING INFORMATION PRODUCED BY THE CELLEBRITE UFED TOOL**

**A. INTRODUCTION**

Pursuant to Federal Rule of Evidence 702, the Court acts as a gatekeeper for expert testimony to ensure that it “both rests on a reliable foundation and is relevant to the task at hand.” *Daubert v. Merrill Dow Pharmaceuticals, Inc.*, 509 U.S. 579, 597 (1993); *United States v. Cruz*, 363 F.3d 187, 192 (2d Cir. 2004).

Before admitting proffered expert testimony, the Court must conclude not only that such testimony is reliable, but also that it “fits” the facts of the case and will thereby assist the jury in understanding the evidence or some factual issue in dispute. *See Daubert*, 509 U.S. 591; Fed. R. Evid. 702. This fit requirement is “akin to the relevance requirements of Rule 401, which is applicable to all proffered evidence, but goes beyond mere relevance because it also requires expert testimony to have a valid connection to a pertinent inquiry.” Weinstein, J. & Berger, M., 4 Weinstein’s Federal Evidence § 702.03[1]. As the Supreme Court put simply “[e]xpert testimony which does not relate to an issue in the case is not relevant and, ergo, non-helpful.” *Daubert*, 509 U.S. at 591.

In addition, expert testimony must also satisfy Rule 403 and may be excluded if its “probative value is substantially outweighed by a danger of . . . unfair prejudice, confusing the issues, [or] misleading the jury.” Fed. R. Evid. 403; *United States v. Dukagjini*, 326 F.3d 45, 54 (2d Cir. 2003).

As the Supreme Court noted in *Daubert*:

Rule 403 permits the exclusion of relevant evidence "if its probative value is substantially outweighed by the danger of unfair prejudice,

confusion of the issues, or misleading the jury . . . ." Judge Weinstein has explained: "Expert evidence can be both powerful and quite misleading because of the difficulty in evaluating it. Because of this risk, the judge in weighing possible prejudice against probative force under Rule 403 of the present rules exercises more control over experts than over lay witnesses." Weinstein, 138 F.R.D. at 632.

509 U.S. at 595, *quoting* Jack B. Weinstein, Rule 702 of the Federal Rules of Evidence Is Sound: It Should Not Be Amended, 138 F.R.D. 631, 631-632 (1991).

The government had notified some of the defendants prior to the previously-scheduled November trial date of its intent to offer historical cell site location testimony and exhibits. It appended to the notice maps reflecting the location of cell sites to which phones it alleges were used by defendants connected on the dates listed in the notice. [Notice and exhibits appended at Exhibit A.] In the same notice, the government stated its intention to offer testimony regarding data extracted from cellphones and electronic devices. The discovery reflects that the extractions were accomplished by using the Cellebrite UFED extrapolation tool. Undersigned defendants submit that the government cannot demonstrate that either the cellphone location data or the extrapolation tool is reliable.

**B. THE GOVERNMENT CANNOT MEET ITS BURDEN OF PROVING THAT HISTORICAL CELL SITE TESTIMONY IS RELIABLE.**

The constructive presumption of the Government's disclosure is that the Government intends to offer expert testimony about cell site information as a means to prove that defendants were in the general vicinity of specific locations at various times relevant to the Government's case. To the extent that presumption is correct, the expert testimony and opinion must be precluded at trial.

Federal Rule of Evidence 702 provides that a witness who is qualified as an expert may

testify in the form of an opinion when

the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue; (2) the testimony is based on sufficient facts or data; (3) the testimony is the product of reliable principles and methods; and (4) the expert has reliably applied the principles and methods to the facts of the case.

Fed. R. Evid. 702.

In *Daubert*, the Supreme Court held that Rule 702 requires the trial judge to assume the role of “gatekeeper” with the task of ensuring “that an expert’s testimony both rests on a reliable foundation and is relevant to the task at hand.” 509 U.S. at 597. This Court must make “a preliminary assessment of whether the reasoning or methodology underlying the testimony is scientifically valid and of whether that reasoning or methodology properly can be applied to the facts at issue.” *Id.* at 592–93.

To guide the assessment of the reliability of an expert’s methodology, the Supreme Court has set out several factors to consider, including:

- (I) whether the theory is based on scientific or other specialized knowledge that has been or can be tested;
- (ii) whether the theory has been subjected to peer review;
- (iii) the known or potential rate of error and the existence of standards controlling the theory’s operation; and
- (iv) the extent to which the theory is generally accepted in the relevant community.

*Id.* at 593–94.

However, the *Daubert* factors are “meant to be helpful, not definitive,” and the trial court retains the discretion to determine how to evaluate an expert’s reliability on a case-by case basis.



*Kumho Tire Co., Ltd. v. Carmichael*, 526 U.S. 137, 151–52 (1999) (extending *Daubert*’s holding on scientific expert testimony to all expert testimony). The principal consideration is whether the evidence is sufficiently reliable for presentation to the jury through expert testimony. The proponent of the testimony bears the burden of proving that the proffered testimony meets these requirements. See *United States v. Williams*, 506 F.3d 151, 160 (2d Cir. 2007).

Over the past decade, law enforcement’s use of historical cell site location analysis has come under increasing scrutiny by courts, scholars, and commentators.<sup>1</sup> This is because, although courts have generally admitted expert testimony relating to historical cell site location analysis, the accuracy and reliability of the methodology have not been scientifically verified. See generally Aaron Blank, *The Limitations and Admissibility of Using Historical Cellular Site Data to Track the Location of a Cellular Phone*, 18 Rich. J.L. & Tech. 3 (2011); see also *United States v. Williams*, 506 F.3d at

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<sup>1</sup>See, e.g., *United States v. Hill*, 818 F.3d 289, 299 (7th Cir. 2016) (cautioning the Government “not to present historical cell-site evidence without clearly indicating the level of imprecision—with which that particular evidence pinpoints a person’s location at a given time.”); *United States v. Reynolds*, 626 F. App’x 610, 618 (6th Cir. 2015) (finding no abuse of discretion in admitting historical cell site analysis where agent’s “technique thereby avoided the disputed assumption that each call connected to the nearest tower or originated from within a specific cell sector”); *United States v. Evans*, 892 F. Supp. 2d 949, 956 (N.D. Ill. 2012) (rejecting agent’s novel and “wholly untested” theory of granulation, which he claimed allowed prediction of coverage overlap of two closely positioned towers, but admitting traditional historical cell site analysis); Victoria Saxe, *Note, Junk Evidence: A Call to Scrutinize Historical Cell Site Location Evidence*, 19 U.N.H. L. Rev. 133 (2020); Thomas J. Kirkham, *Note, Rejecting Historical Cell Site Location Information as Unreliable Under Daubert and Rule 702*, 50 U. Tol. L. Rev. 361, 381 (2019); Paul W. Grimm, *Admissibility of Historical Cell Phone Location Evidence*, 44 No. 4 Litigation 53, 56 (2018); John B. Minor, *Forensic Cell Site Analysis: A Validation & Error Mitigation Methodology*, 12 J. Digit. Forensics, Security, & L. 33 (2017); Tom Jackman, *Experts say law enforcement’s use of cellphone records can be inaccurate*, Wash. Post (June 27, 2014) (“The use of cellphone records to place suspects at or near crime scenes is coming under attack in courts nationwide, challenging an established practice by federal and local law enforcement that has helped lead to thousands of convictions.”); Douglass Starr, *What Your Cell Phone Can’t Tell the Police*, New Yorker (June 26, 2014) (“[Y]ears of prosecutions and plea bargains have been based on a misunderstanding of how cell networks operate.”).

160 (“[E]xpert testimony long assumed reliable before Rule 702 must nonetheless be subject to the careful examination that *Daubert* and *Kumho Tire* require.”). This Court is among the courts questioning similar testimony. *United States v. Nieves*, 2021 U.S. Dist. LEXIS 74763;

As set out below, the Government is unable to meet its burden with respect to the proposed expert testimony. The myriad unknowns about historical cell site location information include: whether the underlying data is itself accurate; what external factors affect the signal strength of the surrounding cell sites; the precise coverage range of the relevant towers at the time; and how often a cellphone does not connect to the closest tower. Because these unknowns substantially undermine the reliability of the proposed analysis, it cannot and should not be admitted at trial.

1. *Historical cell site analysis is based on untested assumptions and techniques.*

By way of background, cellphones send and receive radio signals between phones’ internal antennas and cell towers, also known as cell sites. See Larry E. Daniel & Lars E. Daniel, *Digital Forensic For Legal Professionals: Understanding Digital Evidence From The Warrant To The Courtroom* 229–30 (R. Maxwell & S. Spielman eds., 2012). Cell towers are designed to cover certain geographic areas, but the coverage area varies, and the range can be affected by external factors—for instance, during an influx of users into the coverage area, the range may decrease to accommodate the increase. *Id.* at 226, 233. Cell tower coverage areas are designed to overlap to optimize coverage and ensure smooth hand-offs between coverage areas. Accordingly, a cellphone is usually within the coverage area of multiple cell towers. *Id.* at 229–30.

“It is a common misconception that a cellphone connects to the cell tower physically closest to it when registering to a cellular network.” Saxe, *supra*, at 139; see also Blank, *supra*, at 3, 6, 16. Cellular networks are designed to connect a phone receiving or sending a call or text to the tower

with the strongest signal. Daniel & Daniel, *supra*, at 229–30. Though proximity to the cell tower is important, a host of factors affect the signal strength, such as the number of available cell towers, topography, weather, population density and the technical characteristics of the cell tower. Blank, *supra*, at 6.

When a cellphone sends or receives a text message or phone call and connects with a cell tower, the registration is processed by the carrier, and the carrier records the information for customer billing purposes. Daniel & Daniel, *supra* at 163, 225. This information is maintained purely for billing purposes; historical cell site information, unlike GPS, was not designed to track a user’s location. *See* Kirkham, *supra*, at 377.

When a party requests information for a particular phone number from the carrier, the information is produced in call detail records (CDRs), which typically show the date and time of the call, the duration of the call, the calling number, the called number, the carrier identifier, the billable time of the call, and the tower locations that connected to the call (either one cell site location if there was no handoff or two cell site locations tracking the beginning and end of the call).

Typical analysis of historical cell site data assumes the carriers’ underlying CDR data is 100% accurate. This is incorrect. It is also known that CDR records are sometimes “lost,” meaning “the CDR(s) could not be placed into the destination file due to irrecoverable errors.” John B. Minor, *Forensic Cell Site Analysis: Mobile Network Operator Evidence Integrity Maintenance Research*, 14 J. Digit. Forensics, Security & L. 59, 69 (2019). Cell carriers, however, do not provide any information on when or how often the “lost CDR indicator” is applied or when cell tower information is inaccurate. *See id.* at 169.

It is also error to assume that cell tower location data is always accurate. Indeed, according

to the only peer-reviewed study of which the defense is aware assessing the error rate relating to historical cell site location analysis, carrier records “erroneously identified more than 20 cell site locations within a radius of 2 miles.” Minor, A Validation & Error Mitigation Methodology, *supra*, at 35. A review by the Denmark National Police uncovered significant errors in carrier cell tower location records:

[T]he telecom providers’ mast lists have not been correct and continuously updated, and [ ] there have therefore been errors in the telecommunications providers’ historical lists of the telemasters’ locations. It could be, for example, because a telecommunications company has set up temporary masts due to repairs [of] existing masts, or because there is a festival in an area and that therefore needs extra masts as there are more people gathered in one place.

Louise Dalsgaard & Emma Toft, *Understand the Mistakes in the Telecommunications Scandal: Telephone was in Copenhagen and Frederikshavn at the Same Time*, Danish Broad. Corp. (Aug. 31, 2019), <https://www.dr.dk/nyheder/indland/forstaa-fejlene-i-teleskandalentelefon-var-i-koebenhavn-og-frederikshavn-paa-samme>.

Third, historical cell site analysis generally makes faulty assumptions about coverage area. Carriers’ CDR and tower data provide no information about the strength of a given tower’s signal. To test the range of a cell tower, carriers conduct forensic radio surveys, or “drive” tests, in which an engineer drives through the area while operating mobile receiver equipment to measure the signal strength in the area. *See Saxe, supra*, at 144. There is no indication in the Government’s notice whether this type of drive test was conducted here. In any event, “given all the factors that affect signal strength and the unlikelihood that the weather and cellular network conditions during the test drive are identical to those when the cellular activity actually occurred, the reliability of this methodology is disputed.” *Id.*; Erin Murphy, *The New Forensics: Criminal Justice, False Certainty*,

*and the Second Generation of Scientific Evidence*, 95 Cal. L. Rev. 721, 772–73 (2007) (“[V]erifying that a cell-site report obviously difficult to scrutinize.”).

Finally, the fundamental assumption underlying historical cell site analysis is that cellphones generally connect to the cell tower that is closest to the phone. *See Reynolds*, 626 F. App’x at 618 (noting that “[t]he ‘one-location’ tracking approach assumes that the cellphone connected to the closest tower because that tower is most likely to produce the strongest signal” and finding that the district court did not abuse its discretion in allowing that testimony because the agent’s process “avoided the disputed assumption that each call connected to the nearest tower”). What little data there is disproves the assumption in a significant number of cases, especially in urban areas, with their high density of both buildings and cellphone users. *See also Jackman, supra* (“There are so many different factors [involved] that two cellular devices stationed next to each other making phone calls at the same moment could still get different towers . . . . I’ve seen proof that two individuals, subscribed to the same cellular provider, standing next to each other—on surveillance—can still get different towers.” (quoting Jeff Fischbach, forensic expert)).

Topography, geography, weather, population density, and cell tower outages often impact signal strength. In one study, after taking steps to account for these factors, the final map of the coverage area was modified in approximately 40% of the cases and “in 6% of the cases, use of the validation and error mitigation process resulted in a modified final mapping analysis that impacted the outcome of the case in terms of the verdict of guilt or innocence in criminal cases or damages awarded in civil litigation.” Minor, *A Validation & Error Mitigation Methodology, supra*, at 45–46.

At best, historical cell site analysis can sometimes show that an individual is within one to five kilometers of a cell tower (if it is a small macro cell), as well as where an individual likely was

not. *See* Br. for the United States-Appellee, *Carpenter v. United States*, 138 S. Ct. 2206, at 11, 24 (2018) (the Government argued that “[i]nferences about location drawn from cell site information are far less precise than GPS data and do not permit a detailed reconstruction of a person’s movements” and noting that historical cell site analysis was “as much as 12,500 times less accurate than GPS data”).

Other federal agencies have recognized the dangers in relying on cell tower evidence as a proxy for location. Indeed, the Federal Communications Commission changed its 911 regulations from determining location based on cell site data to using GPS data. *See* Michael Cherry et al., *Cell Tower Junk Science*, 95 *Judicature* 151 (2012). This is because, when the 911 system relied on the location of the cell tower to which an emergency caller pinged, responders often went to the wrong place, in some instances arriving at some location miles away from the caller’s actual location. *See* Saxe, *supra*, at 149–50; Location-Based Routing for Wireless 911 Calls, 33 *FCC Rcd.* 3238, 1 (Mar. 23, 2018). In one instance, responders were routed to Philadelphia, Pennsylvania after a woman suffered a head trauma in Burlington County, New Jersey, twenty to thirty minutes away from Philadelphia. *See* Kirkham, *supra*, 50 *U. Tol. L. Rev.* at 381.

As one commentator has explained, “[a] methodology that has been determined by independent government agencies not to be able to stake a caller’s life on should not now be accepted as reliable enough to risk a defendant’s liberty.” Cherry et al., *supra*, at 152. Historical cell-site evidence is not sufficiently reliable to be admitted against a defendant in a criminal trial.

*2. Historical cell site analysis has not been subject to peer review or publication.*

To counsel’s knowledge, there has only been one peer-reviewed study about the validity of historical cell site mapping as used by law enforcement. *See United States v. Allums*, No. 08 Cr. 30

(TS), 2009 WL 806748, at \*2 (D. Utah Mar. 24, 2009) (explaining that the analyst was unable to “identify any peer-review process that the methodology has undergone, nor the rates of error”). As detailed above, this study looked at factors, such as weather and topography, that can affect a site’s signal strength. *See* Minor, A Validation & Error Mitigation Methodology, *supra* (published in the peer-reviewed Journal of Digital Forensics, Security and Law). Based on a review of approximately 100 criminal and civil cases in which an analyst created mapping exhibits, the study concluded: (1) there were validation and error mitigation techniques that analysts could take to improve the accuracy of historical cell tower mapping; (2) only 11% of analysts attempted to validate the geographic locations of cell sites, 7% conducted drive tests to estimate signal strength, and the remaining analysts conducted no validation techniques; and (3) “[u]se of the methodology in the same group of criminal and civil cases resulted in a modified final mapping analysis in approximately 40% of the cases” and impacted the final outcome of the case in 6% of the cases. *Id.* at 35–46.

3. *Historical cell site analysis has no known error rate.*

Further, there is no known error rate of historical cell site analysis to meet the third *Daubert* factor. *See* 509 U.S. at 593–94. Absent an error rate, a court cannot determine whether an expert’s experiences constitute meaningful expertise.

It is unknown how often law enforcement analysts produce an incorrect final mapping analysis. With respect to CDRs and cell tower location information, there is likely an ascertainable error rate, but it has not yet been estimated. Cell carriers do not provide any information on when or how often cell tower information is inaccurate. *See* Minor, *Mobile Network Operator Evidence*, *supra*, at 169. There has also been no attempt to calculate the error rate for analysts’ estimates about

the coverage range of cell sites. *See* Jackman, *supra* (according to one forensic analyst, it is impossible “for anyone to reliably determine the particular coverage area of a cell-tower antenna *after the fact* based solely on historical cell-tower location data or call-detail records” (emphasis added)); *see also id.* (another expert explaining that “[w]e have never seen courtroom evidence . . . that authenticates an antenna’s range”).

There is also no known “error rate” for the fundamental assumption that cellphones generally connect to the closest tower. It is not even properly an “error” when a cellphone does not connect to the closest tower because that is a normal part of how cellular networks are designed to work. Because there is no known error rate in this field, it is impossible to guess how often the conclusions are correct, rendering opinions unreliable.

*4. Historical cell site analysis is not generally accepted by the relevant scientific community.*

Although courts have permitted the Government’s introduction of expert cell site testimony, historical cell site analysis has not been generally accepted by the relevant scientific community. Courts that credited the methodology “relied primarily on other federal courts’ acceptance of historical cell-site tracking to conclude that the technique is reliable.” *Reynolds*, 626 F. App’x at 616. Such reliance, however, is circular and should be avoided. *See United States v. Hill, supra*, at 297 (“[J]udicial acceptance is not relevant; what matters is the general acceptance in the relevant *expert* (scientific or otherwise) community”).

*United States v. Schaffer*, one of the original cases finding that historical cell site analysis was reliable (without appearing to apply the *Daubert* factors), found it persuasive that the “FBI had been successful at least 1000 times.” 439 F. App’x 344, 347 (5th Cir. 2011); *see also Allums*, 2009 WL



806748, at \*2 (“The methodology . . . has general acceptance in the area of law enforcement.”). But it remains unclear what the court meant by “successful.” See *Reynolds*, 626 F. App’x at 616 (referring to the claim relied upon in *Schaffer* and finding that “[t]his claim appears to be precisely the sort of ‘ipse dixit of the expert’ testimony that should raise a gatekeeper’s suspicion”). Without knowing the import of the FBI’s “success” rate, this claim is meaningless.

**C. THE GOVERNMENT’S PROFFERED HISTORICAL CELL SITE EVIDENCE SHOULD BE EXCLUDED AS IRRELEVANT, OR, IN THE ALTERNATIVE, BECAUSE IT IS MORE PREJUDICIAL THAN PROBATIVE.**

The Government’s cell site evidence fails to satisfy the threshold of relevance. Because a cell phone does not necessarily connect to the nearest tower with any scientific level of accuracy or reliability, evidence that a particular cell phone connected with a particular tower makes no “fact that is of consequence to the determination of the action more probable or less probable” and therefore fails to satisfy the threshold relevance inquiry and should not be submitted to the jury for its consideration. Fed. R. Evid. 401 (“[r]elevant evidence” is “evidence having any tendency to make the existence of any fact that is of consequence to the determination of action more probable or less probable than it would be without the evidence”); see also *Daubert*, 509 U.S. at 591 (“Rule 702 further requires that the evidence or testimony assist the trier of fact to understand the evidence or to determine a fact in issue. This condition goes primarily to relevance.”); *United States v. Hill*, *supra*, 818 F.3d at 296 (“When evaluating whether an expert’s testimony should be admitted, a court must consider whether the expert’s testimony is ‘supported by appropriate validation’ and ‘will assist the trier of fact to understand or determine a fact in issue.’”), quoting *Daubert*.

Additionally, the Court should exclude an expert’s testimony under Rule 403 if “its probative value is substantially outweighed by the danger of unfair prejudice, confusion of the issues, or

misleading the jury, or by considerations of undue delay, waste of time, or needless presentation of cumulative evidence.” Expert testimony risks violating Rule 403 because it can be powerful and misleading, and thus difficult to evaluate. *See Daubert*, 509 U.S. at 595. *See, e.g., United States v. Nieves*, No. 19 Cr. 354 (JSR), 2021 WL 1535338, at \*1 (S.D.N.Y. Apr. 18, 2021) (excluding testimony from cell site analyst under Rule 403).

**D. THE COURT SHOULD PRECLUDE THE GOVERNMENT FROM OFFERING INTO EVIDENCE DATA EXTRACTED FROM DEFENDANTS’ CELLPHONES, AND TESTIMONY RELYING ON THAT DATA, SINCE IT CANNOT ESTABLISH THAT THE CELLEBRITE UFED EXTRAPOLATION TOOL IS RELIABLE.**

The Government has provided in discovery a so-called extrapolation reports of cellphones seized from codefendants J. Smith and Jackson. The reports were created using the Cellebrite UFED extrapolation and analysis tool. What has not been provided is the identification of witnesses whom it would call to testify as to the reliability of the “Cellebrite” device. According to its notice, it is the government’s intent to elicit testimony regarding the extractions from unnamed federal agents.

A “Cellebrite” device is a machine produced by third-party company Cellebrite Mobile Synchronization, Ltd., an Israeli digital intelligence company. Cellebrite advertises itself as “enabl[ing] investigators to capture insights in today’s complex, digital world” by “provid[ing] a complete and objective picture of evidence, empowering agencies and investigators to solve and close cases faster than ever.” *See, e.g.,* <https://www.cellebrite.com/en/about/>. The Cellebrite devices are connected to another electronic device via a cord. The Cellebrite device then purports to create a copy of the subject device (even if it has been “locked” by the user), transferring the information to a disc or other medium.

Courts appear to frequently allow testimony regarding the *results* of a Cellebrite “copy,” but

have not analyzed the reliability of the purported copy in the first instance. This concern was raised in a concurring and dissenting opinion in *United States v. McLeod*, 755 F. App'x 670 (9th Cir. 2019). There (as is apparently proposed here), an agent testified about how he used a Cellebrite device during the course of an investigation to obtain information from a cell phone. *Id.* at 673. The court allowed the testimony to proceed as lay testimony, but did not analyze the underlying technology in the first place. In a dissent, District Judge Molloy of the District of Montana, sitting by designation, noted this incongruity: “simply because the user can follow prompts from the program does not mean that expert testimony is not required or that the underlying technology is reliable.” *Id.* at 676. Indeed, Judge Molloy pointed out the defendant had been able to demonstrate that Cellebrite devices are not infallible and in fact can “produce significant errors, including not acquiring files and misreporting data.” *Id.*

Here, the Government has failed to identify as an expert the person or persons who purport to be able to explain how the system functions and establish the reliability of the underlying technology. Testimony by someone who plugged a phone into a device and pushed the start button does not explain what the device is *doing*, what its *error rate is*, and whether the results can meet the *Daubert* standard for *reliability*.

There are good reasons for skepticism since Cellebrite sells its products almost exclusively to government entities, and does not answer questions or reveal its processes to the general public, explaining instead that its technology is “proprietary.”<sup>2</sup> In addition, industry experts

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<sup>2</sup>For example, if one travels to Cellebrite’s website and attempts to purchase a UFED Premium device, one is immediately pressed for personal information along with the “Agency/Organization/Company” requesting the information. Cellebrite further warns “Purchasing UFED Premium is conditional upon agency vetting and Cellebrite regulations,”

have questioned the reliability of the Cellebrite technology. In fact, two years ago, Moxie Marlinspike, the founder of the Signal encrypted messaging application, announced to the tech field that he had hacked the Cellebrite tool and uncovered a series of vulnerabilities in the program, making it vulnerable to producing unreliable results. *See* Hern, Alex, *Signal founder: I hacked police phone-cracking tool Cellebrite*, The Guardian, April 22, 2021 (attached as Exhibit B). There are further no independent national or (even international) standards governing Cellebrite, which means that Cellebrite is essentially unmonitored and unaccountable. If the Government intends to introduce into evidence the end product of Cellebrite's technology, it may not shield the methods and processes of that technology from scrutiny under *Daubert*. The Government must establish the reliability of its underlying technology before its witnesses should be permitted to testify regarding the data allegedly uncovered by the Cellebrite program.

#### **E. CONCLUSION**

For the reasons set forth herein, and for any that are apparent at a subsequent hearing or oral argument, the Court should conclude that the Government's proffered historical cell site evidence is inadmissible. In the alternative, the Court should hold a *Daubert* hearing at which the Government must establish the admissibility of this evidence. Furthermore, the Court should preclude the Government from offering the Cellebrite extrapolation reports or information derived from those reports unless it establishes the reliability of the Cellebrite tool at a *Daubert* hearing.

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whatever those are. What are the acceptable industries to Cellebrite? There are only two options on the order form: "Law Enforcement" and "Military/Intelligence." *See* <https://www.cellebrite.com/en/ufed-premium/#form>.

Respectfully submitted,

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